Page 1 of 1

## STIC-EIC1600/2900

SHOBHA KANTAMNENI [shobha.kantamneni@uspto.gov] From:

Tuesday, February 17, 2009 9:06 AM Sent:

STIC-EIC1600/2900 To:

Subject: Search Request, Case/Application No.: 10590575

Requester: SHOBHA KANTAMNENI (P/1617) Art Unit: GROUP ART UNIT 1-17

Employee Number:

Office Location: REM 4A5 Phone Number: (571)272-2930

Case/Application number: 10590575

Priority Filing Date:

Format for Search Results: No selection Meaning of unusual acronyms or initialisms:

Identify the novelty:

## Additional comments:

Please, do structure search for compounds of formula as in claim 28. Please, include all the compounds as in claims 32-37. See attached claims.

Attachment: Yes (590575, Claims, Whole Document.pdf)

## => d ibib abs hitstr 16 1-2

L6 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2007:733706 HCAPLUS Full-text

DOCUMENT NUMBER: 147:110212

TITLE: Methods for treating cutaneous lupus using

aminoisoindoline compounds

INVENTOR(S): Zeldis, Jerome B.; Rohane, Patricia E. W.;

Schafer, Peter H.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 27pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. |            |             |       | KIND  |             | DATE |        |                | APPLICATION NO. |      |      |      |          | D.       | DATE     |      |          |
|------------|------------|-------------|-------|-------|-------------|------|--------|----------------|-----------------|------|------|------|----------|----------|----------|------|----------|
| US         | 2007       | 70155791 A1 |       |       | 20070705    |      |        | US 2006-645319 |                 |      |      |      | 20061221 |          |          |      |          |
| AU         | 2006       | 3326        | 77    |       | A1          |      | 2007   | 0712           |                 | AU 2 | 006- | 3326 | 77       |          | 20061228 |      |          |
| CA         | 2635       | 252         |       |       | A1          |      | 2007   | 0712           |                 | CA 2 | 006- | 2635 | 252      |          | 2        | 0061 | 228      |
| WO         | 2007       | 0791        | 82    |       | A1          |      |        |                | WO 2006-US49490 |      |      |      |          |          | 20061228 |      |          |
|            | W:         | ΑE,         | AG,   | AL,   | AM,         | ΑT,  | ΑU,    | AZ,            | BA,             | BB,  | BG,  | BR,  | BW,      | BY,      | BZ,      | CA,  | CH,      |
|            |            | CN,         | CO,   | CR,   | CU,         | CZ,  | DE,    | DK,            | DM,             | DZ,  | EC,  | EE,  | EG,      | ES,      | FΙ,      | GB,  | GD,      |
|            |            | GE,         | GH,   | GM,   | GT,         | HN,  | HR,    | HU,            | ID,             | IL,  | IN,  | IS,  | JP,      | KΕ,      | KG,      | KM,  | KN,      |
|            |            | KP,         | KR,   | KΖ,   | LA,         | LC,  | LK,    | LR,            | LS,             | LT,  | LU,  | LV,  | LY,      | MA,      | MD,      | MG,  | MK,      |
|            |            | MN,         | MW,   | MX,   | MY,         | MΖ,  | NA,    | NG,            | NΙ,             | NO,  | NΖ,  | OM,  | PG,      | PH,      | PL,      | PT,  | RO,      |
|            |            | RS,         | RU,   | SC,   | SD,         | SE,  | SG,    | SK,            | SL,             | SM,  | SV,  | SY,  | ΤJ,      | TM,      | TN,      | TR,  | TT,      |
|            |            | TZ,         | UA,   | UG,   | US,         | UΖ,  | VC,    | VN,            | ZA,             | ZM,  | ZW   |      |          |          |          |      |          |
|            | RW:        | ΑT,         | BE,   | ВG,   | CH,         | CY,  | CZ,    | DE,            | DK,             | EE,  | ES,  | FΙ,  | FR,      | GB,      | GR,      | HU,  | ΙE,      |
|            |            | IS,         | IT,   | LT,   | LU,         | LV,  | MC,    | NL,            | PL,             | PT,  | RO,  | SE,  | SI,      | SK,      | TR,      | BF,  | ВJ,      |
|            |            | CF,         | CG,   | CI,   | CM,         | GA,  | GN,    | GQ,            | GW,             | ML,  | MR,  | ΝE,  | SN,      | TD,      | TG,      | BW,  | GH,      |
|            |            | GM,         | KE,   | LS,   | MW,         | MZ,  | NA,    | SD,            | SL,             | SZ,  | TZ,  | UG,  | ZM,      | ZW,      | AM,      | AZ,  | BY,      |
|            |            | KG,         | KΖ,   | MD,   | RU,         | ΤJ,  | TM     |                |                 |      |      |      |          |          |          |      |          |
| EP         | EP 1965793 |             |       |       | A1 20080910 |      |        | EP 2006-848280 |                 |      |      |      |          | 20061228 |          |      |          |
|            | R:         | ΑT,         | BE,   | ВG,   | CH,         | CY,  | CZ,    | DE,            | DK,             | EE,  | ES,  | FI,  | FR,      | GB,      | GR,      | HU,  | ΙE,      |
|            |            | IS,         | IT,   | LI,   | LT,         | LU,  | LV,    | MC,            | NL,             | PL,  | PT,  | RO,  | SE,      | SI,      | SK,      | TR,  | AL,      |
|            |            | BA,         | HR,   | MK,   | RS          |      |        |                |                 |      |      |      |          |          |          |      |          |
| KR         | 2008       | 0865        | 27    |       | Α           |      | 2008   | 0925           |                 | KR 2 | 008- | 7184 | 96       |          | 2        | 0800 | 728      |
| ORIT       | Y APP      | LN.         | INFO  | .:    |             |      |        |                |                 | US 2 | 005- | 7547 | 95P      |          | P 2      | 0051 | 229      |
|            |            |             |       |       |             |      |        |                |                 | US 2 | 005- | 7552 | 46P      |          | P 2      | 0051 | 229      |
|            |            |             |       |       |             |      |        |                |                 | US 2 | 006- | 7874 | 36P      |          | P 2      | 0060 | 330      |
|            |            |             |       |       |             |      |        |                |                 | WO 2 | 006- | US49 | 490      |          | W 2      | 0061 | 228      |
| Mo         | + hode     | o f         | + 200 | + inc | · 011+      | 220  | 0110 ] | 1122110        | in              | a hi | man  | 220  | dico     | 11000    | d        | Snoc | 11 f i 2 |

AB Methods of treating cutaneous lupus in a human are disclosed. Specific methods encompass the administration of (+)-2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4- acetylaminoisoindoline-1,3-dione, 4-(amino)-2-[2,6-dioxo(3-piperidyl)]- isoindoline-1,3-dione (ACTIMID), 3-(4-amino-1-oxo-1,3-dihydroisoindol-2-yl)-piperidine-2,6-dione (REVLIMID), or cyclopropyl 2-[(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-3- oxoisoindolin-4-yl carboxamide, alone or alternatively, in combination with a second active agent. Compound preparation is included.

IT 19171-19-8 39746-25-3, 16,16-Dimethyl-PGE2

191732-72-6 202271-89-4 202271-90-7

202271-91-8 340019-69-4 608141-41-9

874946-00-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(aminoisoindoline compds. for treatment of cutaneous lupus)

RN 19171-19-8 HCAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 4-amino-2-(2,6-dioxo-3-piperidinyl)- (CA INDEX NAME)

RN 39746-25-3 HCAPLUS

CN Prosta-5,13-dien-1-oic acid, 11,15-dihydroxy-16,16-dimethyl-9-oxo-,  $(5Z,11\alpha,13E,15R)$ - (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 191732-72-6 HCAPLUS

CN 2,6-Piperidinedione, 3-(4-amino-1,3-dihydro-1-oxo-2H-isoindol-2-yl)- (CA INDEX NAME)

RN 202271-89-4 HCAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 4-amino-2-[(3S)-2,6-dioxo-3-piperidinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 202271-90-7 HCAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 4-amino-2-[(3R)-2,6-dioxo-3-piperidinyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 202271-91-8 HCAPLUS

CN 2,6-Piperidinedione, 3-(4-amino-1,3-dihydro-1-oxo-2H-isoindol-2-yl)-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 340019-69-4 HCAPLUS

CN Cyclopropanecarboxamide, N-[2-[(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-2,3-dihydro-3-oxo-1H-isoindol-4-yl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 608141-41-9 HCAPLUS

CN Acetamide, N-[2-[(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-2,3-dihydro-1,3-dioxo-1H-isoindol-4-yl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 874946-00-6 HCAPLUS

CN 2,6-Piperidinedione, 3-(4-amino-1,3-dihydro-1-oxo-2H-isoindol-2-yl)-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1188-21-2 HCAPLUS

CN L-Leucine, N-acetyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 4023-34-1 HCAPLUS

CN Cyclopropanecarbonyl chloride (CA INDEX NAME)

RN 253168-94-4 HCAPLUS

CN Benzenemethanamine, 3-ethoxy-4-methoxy- $\alpha$ -[(methylsulfonyl)methyl]- (CA INDEX NAME)

RN 635705-76-9 HCAPLUS

CN 1H-Isoindol-1-one, 7-amino-2-[(1S)-1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl)ethyl]-2,3-dihydro- (CA INDEX NAME)

Absolute stereochemistry.

RN 943225-74-9 HCAPLUS

CN Benzoic acid, 2-amino-6-[[[(1S)-4-amino-1-carboxy-4-oxobutyl]amino]carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.

IT 108-24-7P, Acetic anhydride 5434-20-8P, 3-Aminophthalic acid 6296-53-3P, 3-Acetamidophthalic anhydride 608141-43-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(aminoisoindoline compds. for treatment of cutaneous lupus)

2/19/09

RN 108-24-7 HCAPLUS

CN Acetic acid, 1,1'-anhydride (CA INDEX NAME)

Ac-0-Ac

RN 5434-20-8 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, 3-amino- (CA INDEX NAME)

RN 6296-53-3 HCAPLUS

CN Acetamide, N-(1,3-dihydro-1,3-dioxo-4-isobenzofuranyl)- (CA INDEX NAME)

RN 608141-43-1 HCAPLUS

CN L-Leucine, N-acetyl-, compd. with  $(\alpha S)$ -3-ethoxy-4-methoxy- $\alpha$ [(methylsulfonyl)methyl]benzenemethanamine (1:1) (CA INDEX NAME)

CM 1

CRN 608141-42-0

CMF C12 H19 N O4 S

Absolute stereochemistry.

CM 2

CRN 1188-21-2

CMF C8 H15 N O3

Absolute stereochemistry. Rotation (-).

IT 363-24-6, PGE2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combination; aminoisoindoline compds. for treatment of cutaneous

lupus)

RN 363-24-6 HCAPLUS

CN Prosta-5,13-dien-1-oic acid, 11,15-dihydroxy-9-oxo-,

 $(5Z,11\alpha,13E,15S)$  - (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

$$\frac{Z}{R}$$
  $\frac{Z}{R}$   $\frac{CH_2)_4}{Me}$   $\frac{Z}{Me}$ 

L6 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1256700 HCAPLUS Full-text

DOCUMENT NUMBER: 146:811

TITLE: Methods and compositions using 4-[ (

cyclopropanecarbonylamino

)methyl]-2-(2,6-dioxopiperidin-3-yl)isoindole-1,3dione for the treatment or prevention of cutaneous

lupus

INVENTOR(S): Zeldis, Jerome B.; Rohane, Patricia E. W.;

Schafer, Peter H.

PATENT ASSIGNEE(S): Celgene Corporation, USA

SOURCE: PCT Int. Appl., 46pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIN     | ID DATE    | :   | APPLICATION NO. |                 |     |     |     | DATE |     |          |     |  |
|---------------|---------|------------|-----|-----------------|-----------------|-----|-----|-----|------|-----|----------|-----|--|
| WO 2006127938 | <br>A1  | A1 2006113 |     |                 | WO 2006-US20311 |     |     |     |      |     | 20060523 |     |  |
|               | AL, AM, |            |     |                 | -               |     |     | _   |      |     |          |     |  |
| CN, CO        | CR, CU, | CZ, DE,    | DK, | DM,             | DZ,             | EC, | EE, | EG, | ES,  | FI, | GB,      | GD, |  |
| GE, GH        | GM, HR, | HU, ID,    | IL, | IN,             | IS,             | JP, | KE, | KG, | KM,  | KN, | KΡ,      | KR, |  |
| KZ, LC        | LK, LR, | LS, LT,    | LU, | LV,             | LY,             | MA, | MD, | MG, | MK,  | MN, | MW,      | MX, |  |
| MZ, NA        | NG, NI, | NO, NZ,    | OM, | PG,             | PH,             | PL, | PT, | RO, | RU,  | SC, | SD,      | SE, |  |
| SG, SK        | SL, SM, | SY, TJ,    | TM, | TN,             | TR,             | TT, | TZ, | UA, | UG,  | US, | UZ,      | VC, |  |
| VN, YU        | ZA, ZM, | ZW         |     |                 |                 |     |     |     |      |     |          |     |  |
| RW: AT, BE    | BG, CH, | CY, CZ,    | DE, | DK,             | EE,             | ES, | FI, | FR, | GB,  | GR, | HU,      | IE, |  |
| IS, IT        | LT, LU, | LV, MC,    | ΝL, | PL,             | PT,             | RO, | SE, | SI, | SK,  | TR, | BF,      | ΒJ, |  |
| CF, CG        | CI, CM, | GA, GN,    | GQ, | GW,             | ML,             | MR, | NE, | SN, | TD,  | ΤG, | BW,      | GH, |  |

10/590,575

2/19/09

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM US 20060270707 Α1 20061130 US 2006-435089 CA 2608220 Α1 20061130 CA 2006-2608220 20060523 EP 1896024 20080312 EP 2006-771221 20060523 Α1 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU 20081127 JP 2008-513723 JP 2008542290 Т 20060523 PRIORITY APPLN. INFO.: US 2005-684499P P 20050524 WO 2006-US20311 W 20060523 Methods of treating, managing, or preventing cutaneous lupus are disclosed. AΒ Specific methods encompass the administration of 4-[ ( cyclopropanecarbonylamino)methyl]-2-(2,6- dioxopiperidin-3-yl)isoindole-1,3dione (preparation of the HCl salt is described), alone or in combination with a second active agent. Pharmaceutical compns. and single unit dosage forms are also disclosed. ΙT 50-18-0, Cyclophosphamide 50-35-1, Thalidomide 57-92-1, Streptomycin 59-05-2, Methotrexate 60-54-8, Tetracycline 69-53-4, Ampicillin 69-72-7D, Salicylic acid, salicylates, biological studies 89-57-6D, 5-Aminosalicylic acid, derivs. 103-90-2, Acetaminophen 114-07-8, Erythromycin 446-86-6, Azathioprine 768-94-5, Amantadine 1406-05-9, Penicillin 8063-07-8, Kanamycin 11111-12-9, Cephalosporin 13392-28-4, Rimantadine 14769-73-4, Levamisole 36703-88-5, Isoprinosine 36791-04-5, Ribavirin 59277-89-3, Acyclovir 79217-60-0, Cyclosporin RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combination; isoindole derivative for treatment or prevention of cutaneous lupus) RN 50-18-0 HCAPLUS 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, CN 2-oxide (CA INDEX NAME)

RN 50-35-1 HCAPLUS CN 1H-Isoindole-1,3(2H)-dione, 2-(2,6-dioxo-3-piperidinyl)- (CA INDEX NAME)

RN 57-92-1 HCAPLUS

CN D-Streptamine, O-2-deoxy-2-(methylamino)- $\alpha$ -L-glucopyranosyl-  $(1\rightarrow 2)$ -O-5-deoxy-3-C-formyl- $\alpha$ -L-lyxofuranosyl- $(1\rightarrow 4)$ - N1,N3-bis(aminoiminomethyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 59-05-2 HCAPLUS

CN L-Glutamic acid, N-[4-[[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]- (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

RN 60-54-8 HCAPLUS

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aS,5aS,6S,12aS)-(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 69-53-4 HCAPLUS

CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid,

6-[[(2R)-2-amino-2-phenylacetyl]amino]-3,3-dimethyl-7-oxo-, (2S,5R,6R)-(CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & & & \\ & & & \\ H_2N & & & \\ \hline \end{array}$$

RN 69-72-7 HCAPLUS

CN Benzoic acid, 2-hydroxy- (CA INDEX NAME)

RN 89-57-6 HCAPLUS

CN Benzoic acid, 5-amino-2-hydroxy- (CA INDEX NAME)

RN 103-90-2 HCAPLUS

CN Acetamide, N-(4-hydroxyphenyl)- (CA INDEX NAME)

RN 114-07-8 HCAPLUS

CN Erythromycin (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 446-86-6 HCAPLUS

CN 9H-Purine, 6-[(1-methyl-4-nitro-1H-imidazol-5-yl)thio]- (CA INDEX NAME)

RN 768-94-5 HCAPLUS

CN Tricyclo[3.3.1.13,7]decan-1-amine (CA INDEX NAME)

RN 1406-05-9 HCAPLUS

CN Penicillin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 8063-07-8 HCAPLUS

CN Kanamycin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 11111-12-9 HCAPLUS

CN Cephalosporin (CA INDEX NAME)

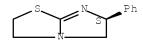
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 13392-28-4 HCAPLUS

CN Tricyclo[3.3.1.13,7]decane-1-methanamine,  $\alpha$ -methyl- (CA INDEX NAME)

RN 14769-73-4 HCAPLUS
CN Imidazo[2,1-b]thiazole, 2,3,5,6-tetrahydro-6-phenyl-, (6S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 36703-88-5 HCAPLUS

CN Inosine, compd. with 1-(dimethylamino)-2-propanol 4-(acetylamino)benzoate (1:3:3) (CA INDEX NAME)

CM 1

CRN 58-63-9

CMF C10 H12 N4 O5

Absolute stereochemistry.

CM 2

CRN 61990-51-0

CMF C9 H9 N O3 . C5 H13 N O

CM 3

CRN 556-08-1

CMF C9 H9 N O3

CM 4

CRN 108-16-7 CMF C5 H13 N O

RN 36791-04-5 HCAPLUS

CN 1H-1,2,4-Triazole-3-carboxamide, 1- $\beta$ -D-ribofuranosyl- (CA INDEX NAME)

Absolute stereochemistry.

RN 59277-89-3 HCAPLUS

CN 6H-Purin-6-one, 2-amino-1,9-dihydro-9-[(2-hydroxyethoxy)methyl]- (CA INDEX NAME)

RN 79217-60-0 HCAPLUS

CN Cyclosporin (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 915764-31-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(isoindole derivative for treatment or prevention of cutaneous lupus)

RN 915764-31-7 HCAPLUS

CN Cyclopropanecarboxamide, N-[[2-(2,6-dioxo-3-piperidinyl)-2,3-dihydro-1,3-dioxo-1H-isoindol-4-yl]methyl]-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN

IT 444287-44-9 444287-44-9D, stereoisomers, salts, and solvates 915764-28-2 915764-29-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(isoindole derivative for treatment or prevention of cutaneous lupus)  $444287-44-9\ \ \text{HCAPLUS}$ 

CN Cyclopropanecarboxamide, N-[[2-(2,6-dioxo-3-piperidinyl)-2,3-dihydro-1,3-dioxo-1H-isoindol-4-yl]methyl]- (CA INDEX NAME)

RN 444287-44-9 HCAPLUS

CN Cyclopropanecarboxamide, N-[[2-(2,6-dioxo-3-piperidinyl)-2,3-dihydro-1,3-dioxo-1H-isoindol-4-yl]methyl]- (CA INDEX NAME)

CN Cyclopropanecarboxamide, N-[[2-(2,6-dioxo-3-piperidinyl)-2,3-dihydro-1,3-dioxo-1H-isoindol-4-yl]methyl]-, (+)- (CA INDEX NAME)

Rotation (+).

RN 915764-29-3 HCAPLUS

CN Cyclopropanecarboxamide, N-[[2-(2,6-dioxo-3-piperidinyl)-2,3-dihydro-1,3-dioxo-1H-isoindol-4-yl]methyl]-, (-)- (CA INDEX NAME)

Rotation (-).

IT 108-31-6, Maleic anhydride, reactions 4023-34-1, Cyclopropanecarbonyl chloride 14064-21-2

24666-56-6

RL: RCT (Reactant); RACT (Reactant or reagent)
(isoindole derivative for treatment or prevention of cutaneous lupus)

RN 108-31-6 HCAPLUS

CN 2,5-Furandione (CA INDEX NAME)

RN 4023-34-1 HCAPLUS

CN Cyclopropanecarbonyl chloride (CA INDEX NAME)

RN 14064-21-2 HCAPLUS

CN 2-Furancarboxaldehyde, 2,2-dimethylhydrazone (CA INDEX NAME)

RN 24666-56-6 HCAPLUS

CN 2,6-Piperidinedione, 3-amino-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

IT 92054-27-8P 444287-40-5P 915764-30-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(isoindole derivative for treatment or prevention of cutaneous lupus)

RN 92054-27-8 HCAPLUS

CN 4-Isobenzofurancarboxaldehyde, 1,3-dihydro-1,3-dioxo-,

4-(2,2-dimethylhydrazone) (CA INDEX NAME)

RN 444287-40-5 HCAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 4-(aminomethyl)-2-(2,6-dioxo-3-piperidinyl)-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 915764-30-6 HCAPLUS

CN 1H-Isoindole-4-carboxaldehyde, 2-(2,6-dioxo-3-piperidinyl)-2,3-dihydro-1,3-dioxo-, 4-(2,2-dimethylhydrazone) (CA INDEX NAME)

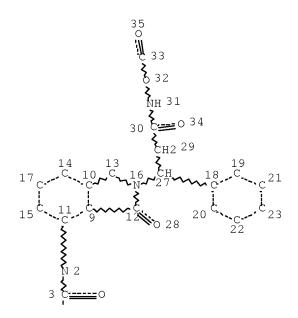
3

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

# RESULTS FROM SEARCHES IN REGISTRY, CAPLUS, AND USPATFULL

=> d que stat 130 L25 STR



Page 1-A



Page 2-A

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 30

STEREO ATTRIBUTES: NONE

L27 6 SEA FILE=REGISTRY SSS FUL L25 L28 1 SEA FILE=HCAPLUS ABB=ON L27 L29 3 SEA FILE=USPATFULL ABB=ON L27

L30 4 DUP REMOV L28 L29 (0 DUPLICATES REMOVED)

=> d ibib abs hitstr 130 1-4

L30 ANSWER 1 OF 4 USPATFULL on STN

ACCESSION NUMBER: 2007:291243 USPATFULL Full-text

TITLE: 7-amido-isoindolyl compounds and methods of its use

INVENTOR(S): Man, Hon-Wah, Princeton, NJ, UNITED STATES

Muller, George W., Bridgewater, NJ, UNITED STATES Zhang, Weihong, Highland Park, NJ, UNITED STATES

PATENT ASSIGNEE(S): Celgene Corporation. (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 20070254942 A1 20071101 APPLICATION INFO:: US 2007-818927 A1 20070615 (11)

RELATED APPLN. INFO.: Division of Ser. No. US 2005-250408, filed on 17 Oct

2005, GRANTED, Pat. No. US 7256210 Division of Ser. No. US 2004-798317, filed on 12 Mar 2004, GRANTED, Pat. No.

US 7034052

NUMBER DATE

PRIORITY INFORMATION: US 2003-454155P 20030312 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: JONES DAY, 222 EAST 41ST ST, NEW YORK, NY, 10017, US

NUMBER OF CLAIMS: 23 EXEMPLARY CLAIM: 1-45 LINE COUNT: 3431

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention encompasses 7-amido-isoindolyl compounds and methods of using these compounds and compositions in mammals for treatment, prevention or management of various diseases and disorders. Examples include, but are not limited to, cancer, inflammatory bowel disease and myelodysplastic syndrome.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 760958-90-5P 760958-99-4P 760959-12-4P

760959-13-5P 760959-14-6P 760959-15-7P

(preparation of aminoisoindolone derivs. via heterocyclization of aminopropanol derivs. and benzoic acid derivs.)

RN 760958-90-5 USPATFULL

CN 2H-Isoindole-2-propanamide, N-(acetyloxy)-7-[(cyclopropylcarbonyl)amino]-  $\beta$ -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, ( $\beta$ R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 760958-99-4 USPATFULL

CN 2H-Isoindole-2-propanamide, N-(acetyloxy)-4-chloro-7- [(cyclopropylcarbonyl)amino]- $\beta$ -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, ( $\beta$ R)- (CA INDEX NAME)

RN 760959-12-4 USPATFULL

CN Cyclopropanecarboxylic acid, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 760959-13-5 USPATFULL

CN Propanoic acid, 2-methyl-, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

Absolute stereochemistry.

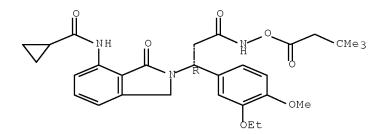
RN 760959-14-6 USPATFULL

CN Propanoic acid, 2,2-dimethyl-, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

RN 760959-15-7 USPATFULL

CN Butanoic acid, 3,3-dimethyl-, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

Absolute stereochemistry.



L30 ANSWER 2 OF 4 USPATFULL on STN

ACCESSION NUMBER: 2006:68140 USPATFULL <u>Full-text</u>

TITLE: 7-Amido-isoindolyl compounds and methods of their use

INVENTOR(S): Man, Hon-Wah, Princeton, NJ, UNITED STATES

Muller, George W., Bridgewater, NJ, UNITED STATES Zhang, Weihong, Highland Park, NJ, UNITED STATES

|                       | NUMBER                       | KIND | DATE                         |
|-----------------------|------------------------------|------|------------------------------|
| PATENT INFORMATION:   | US 20060058362               |      |                              |
| APPLICATION INFO.:    | US 7256210<br>US 2005-250408 |      | 20070814                     |
| RELATED APPLN. INFO.: |                              |      | 2004-798317, filed on 12 Mar |
|                       | 2004, PENDING                |      |                              |

NUMBER DATE

PRIORITY INFORMATION: US 2003-454155P 20030312 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: JONES DAY, 51 Louisiana Aveue, N.W, WASHINGTON, DC,

20001-2113, US

NUMBER OF CLAIMS: 23 EXEMPLARY CLAIM: 1-45 LINE COUNT: 3452

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention encompasses 7-amido-isoindolyl compounds and methods of using these compounds and compositions in mammals for treatment, prevention or

management of various diseases and disorders. Examples inlcude, but are not limited to, cancer, inflammatory bowel disease and myelodysplastic syndrome.

Absolute stereochemistry.

RN 760958-99-4 USPATFULL

CN 2H-Isoindole-2-propanamide, N-(acetyloxy)-4-chloro-7- [(cyclopropylcarbonyl)amino]- $\beta$ -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, ( $\beta$ R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 760959-12-4 USPATFULL

CN Cyclopropanecarboxylic acid, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

RN 760959-13-5 USPATFULL

CN Propanoic acid, 2-methyl-, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 760959-14-6 USPATFULL

CN Propanoic acid, 2,2-dimethyl-, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 760959-15-7 USPATFULL

CN Butanoic acid, 3,3-dimethyl-, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

L30 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2004:780510 HCAPLUS Full-text

DOCUMENT NUMBER: 141:277486

TITLE: A preparation of 7-aminoisoindolone derivatives INVENTOR(S): Man, Hon-Wah; Muller, George W.; Zhang, Weihong

PATENT ASSIGNEE(S): Celgene Corporation, USA SOURCE: PCT Int. Appl., 109 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

|         | PATENT NO.            |      |     |     |             |     |      |          |  | APPLICATION NO. |                |      |          |     |          |      |     |  |
|---------|-----------------------|------|-----|-----|-------------|-----|------|----------|--|-----------------|----------------|------|----------|-----|----------|------|-----|--|
| WO      | 2004<br>2004          | 0804 | 23  |     | A2          |     | 2004 | 0923     |  |                 |                |      |          |     |          | 0040 | 312 |  |
|         |                       |      |     |     |             |     |      |          |  | BB              | , BG,          | BR,  | BW,      | BY, | BZ,      | CA,  | CH, |  |
|         |                       |      |     |     |             |     |      |          |  |                 | , EC,          |      |          |     |          |      |     |  |
|         |                       |      |     |     |             |     |      |          |  |                 | , JP,          |      |          |     |          |      |     |  |
|         |                       |      |     |     |             |     |      |          |  |                 | , MK,          |      |          |     |          |      |     |  |
|         |                       | •    |     |     |             |     | •    | ,        |  |                 | , SC,          |      | ,        | •   | ,        | ,    |     |  |
|         |                       |      |     |     |             |     |      |          |  |                 | , UZ,          |      |          |     |          |      |     |  |
|         | RW:                   |      |     |     |             |     |      |          |  |                 | , SZ,          |      |          |     |          |      |     |  |
|         |                       | •    | •   | •   |             |     |      | •        |  |                 | , BG,          | •    | •        | •   |          |      |     |  |
|         |                       |      |     |     |             |     |      |          |  |                 | , MC,          |      |          |     |          |      |     |  |
|         |                       |      |     |     |             |     |      |          |  |                 | , GN,          |      |          |     |          |      |     |  |
|         |                       | TD,  |     | ,   | ·           | ·   | ·    | ŕ        | ·  |                 | •              | ~ '  | ŕ        | ·   | ·        | ·    | ĺ   |  |
| AU      | 2004                  | 2204 | 57  |     | A1          |     | 2004 | 0923     |  | AU 2            | 2004-          | 2204 | 57       |     | 2        | 0040 | 312 |  |
|         | 2518                  |      |     |     | A1 20040923 |     |      | 0923     | CA 2004-2518584                                    |                 |                |      |          |     |          |      |     |  |
| US      | US 20040254214        |      |     |     | A1          |     | 2004 | 1216     |  | US 2            | 2004-          | 7983 | 17       |     | 2        | 0040 | 312 |  |
| US      | 7034                  | 052  |     |     | В2          |     | 2006 | 0425     |  |                 |                |      |          |     |          |      |     |  |
| EP      | 1605                  | 896  |     |     | A2          |     | 2005 | 1221     |  | EP 2            | 2004-          | 7204 | 48       |     | 2        | 0040 | 312 |  |
|         | R:                    | ΑT,  | BE, | CH, | DE,         | DK, | ES,  | FR,      | GB,  | GR,             | , IT,          | LI,  | LU,      | NL, | SE,      | MC,  | PT, |  |
|         |                       | ΙE,  | SI, | LT, | LV,         | FI, | RO,  | MK,      | CY,  | AL,             | , TR,          | BG,  | CZ,      | EE, | ΗU,      | PL,  | SK  |  |
| BR      | 2004                  | 0082 | 23  |     | Α           |     | 2006 | 0301     |  | BR 2            | 2004-          | 8223 |          |     | 2        | 0040 | 312 |  |
| CN      | 1784                  | 382  |     |     | Α           |     | 2006 | 0607     |  | CN 2            | 2004-          | 8001 | 2360     |     | 2        | 0040 | 312 |  |
| JP      | 2006                  | 5198 | 51  |     | T 200608    |     |      | 0831     | BR 2004-8223<br>CN 2004-80012360<br>JP 2006-507155 |                 |                |      |          |     | 20040312 |      |     |  |
| NZ      | 5426                  | 71   |     |     | A 20        |     |      | 20081224 |  |                 | NZ 2004-542671 |      |          |     |          | 0040 | 312 |  |
| US      | 2006                  | 0058 | 362 |     | A1          |     | 2006 | 0316     | US 2005-250408                                     |                 |                |      | 20051017 |     |          |      |     |  |
|         | 7256                  |      |     |     | В2          |     | 2007 | 0814     |  |                 |                |      |          |     |          |      |     |  |
| US      | 2007                  | 0254 | 942 |     | A1          |     | 2007 | 1101     |  |                 | 2007-          |      |          |     |          |      |     |  |
| PRIORIT | RIORITY APPLN. INFO.: |      |     |     |             |     |      |          |  | US 2            | 2003-          | 4541 | 55P      |     | P 2      | 0030 | 312 |  |
|         |                       |      |     |     |             |     |      |          |  | US 2            | 2004-          | 7983 | 17       |     | A3 2     | 0040 | 312 |  |
|         |                       |      |     |     |             |     |      |          |  | WO 2            | 2004-          | US77 | 43       |     | W 2      | 0040 | 312 |  |
|         |                       |      |     |     |             |     |      |          |  | US 2            | 2005-          | 2504 | 08       |     | A3 2     | 0051 | 017 |  |
| OTHER S | OTHER SOURCE(S):      |      |     |     |             | PAT | 141: | 2774     | 86   |                 |                |      |          |     |          |      |     |  |

- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- The invention relates to a preparation of 7-aminoisoindole derivs. of formula I [wherein: Y is C(0), CH2, CH2C(0), or SO2; X is H; Z is -alkyl-CO2H, alkyl, -alkyl-OH, or -alkyl-NH2, etc.; R1 and R2 are independently selected from (cyclo)alkyl or -alkyl-cycloalkyl], useful for treatment, prevention or management of cancer, inflammatory bowel disease, and myelodysplastic syndrome, etc. (no biol. data). For instance, isoindole derivative II was prepared via heterocyclization of aminopropanol derivative III and benzoic acid derivative IV with a yield of 64% (example 1).
- IT 760958-90-5P 760958-99-4P 760959-12-4P 760959-13-5P 760959-14-6P 760959-15-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminoisoindolone derivs. via heterocyclization of aminopropanol derivs. and benzoic acid derivs.)

- RN 760958-90-5 HCAPLUS
- CN 2H-Isoindole-2-propanamide, N-(acetyloxy)-7-[(cyclopropylcarbonyl)amino]-  $\beta$ -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, ( $\beta$ R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 760958-99-4 HCAPLUS
- CN 2H-Isoindole-2-propanamide, N-(acetyloxy)-4-chloro-7- [(cyclopropylcarbonyl)amino]- $\beta$ -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, ( $\beta$ R)- (CA INDEX NAME)

RN 760959-12-4 HCAPLUS

CN Cyclopropanecarboxylic acid, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 760959-13-5 HCAPLUS

CN Propanoic acid, 2-methyl-, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 760959-14-6 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 760959-15-7 HCAPLUS

CN Butanoic acid, 3,3-dimethyl-, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-

dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 4 OF 4 USPATFULL on STN

ACCESSION NUMBER: 2004:321559 USPATFULL Full-text

TITLE: 7-Amido-isoindolyl compounds and their pharmaceutical

uses

INVENTOR(S): Man, Hon-Wah, Princeton, NJ, UNITED STATES

Muller, George W., Bridgewater, NJ, UNITED STATES Zhang, Weihong, Highland Park, NJ, UNITED STATES

|                     |    | NUMBER      | KIND | DATE     |      |
|---------------------|----|-------------|------|----------|------|
|                     |    |             |      |          |      |
| PATENT INFORMATION: | US | 20040254214 | A1   | 20041216 |      |
|                     | US | 7034052     | B2   | 20060425 |      |
| APPLICATION INFO.:  | US | 2004-798317 | A1   | 20040312 | (10) |

NUMBER DATE

PRIORITY INFORMATION: US 2003-454155P 20030312 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: JONES DAY, 51 Louisiana Aveue, N.W, WASHINGTON, DC,

20001-2113

NUMBER OF CLAIMS: 22 EXEMPLARY CLAIM: 1 LINE COUNT: 3628

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention encompasses 7-amido-isoindolyl compounds and methods of using these compounds and compositions in mammals for treatment, prevention or management of various diseases and disorders. Examples inleude, but are not limited to, cancer, inflammatory bowel disease and myelodysplastic syndrome.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 760958-90-5P 760958-99-4P 760959-12-4P

760959-13-5P 760959-14-6P 760959-15-7P

(preparation of aminoisoindolone derivs. via heterocyclization of aminopropanol derivs. and benzoic acid derivs.)

RN 760958-90-5 USPATFULL

CN 2H-Isoindole-2-propanamide, N-(acetyloxy)-7-[(cyclopropylcarbonyl)amino]-  $\beta$ -(3-ethoxy-4-methoxyphenyl)-1,3-dihydro-1-oxo-, ( $\beta$ R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 760958-99-4 USPATFULL

Absolute stereochemistry.

RN 760959-12-4 USPATFULL

CN Cyclopropanecarboxylic acid, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 760959-13-5 USPATFULL

CN Propanoic acid, 2-methyl-, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

RN 760959-14-6 USPATFULL

CN Propanoic acid, 2,2-dimethyl-, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 760959-15-7 USPATFULL

CN Butanoic acid, 3,3-dimethyl-, [(3R)-3-[7-[(cyclopropylcarbonyl)amino]-1,3-dihydro-1-oxo-2H-isoindol-2-yl]-3-(3-ethoxy-4-methoxyphenyl)-1-oxopropyl]azanyl ester (CA INDEX NAME)

#### SEARCH HISTORY

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(FILE 'HOME' ENTERED AT 17:15:16 ON 19 FEB 2009)

FILE 'HCAPLUS' ENTERED AT 17:17:56 ON 19 FEB 2009

E ZELDIS JEROME B/AU

L1 117 SEA ABB=ON ("ZELDIS J R"/AU OR "ZELDIS JEROME"/AU OR "ZELDIS JEROME B"/AU OR "ZELDIS JEROME BERNARD"/AU OR "ZELDIS JERRY B"/AU)

E SCHAFER PETER H/AU

- L2 105 SEA ABB=ON ("SCHAFER PETER"/AU OR "SCHAFER PETER H"/AU OR "SCHAFER PETER HENRY"/AU)
- L3 6 SEA ABB=ON L1 AND L2 SELECT RN L3 1-6

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FILE 'HCAPLUS' ENTERED AT 17:18:50 ON 19 FEB 2009

L5 5 SEA ABB=ON L3 AND L4

L6 2 SEA ABB=ON L5 AND ?CYCLOPROPAN?

FILE 'REGISTRY' ENTERED AT 17:21:47 ON 19 FEB 2009

STRUCTURE 915764-28-2

L8 STRUCTURE 915764-28-2

L9 0 SEA SSS SAM L8

L10 0 SEA SSS FUL L8

L11 STR L8

L7

L16

L19

L12 0 SEA SSS SAM L11

L13 0 SEA SSS FUL L11

D COST

L14 STR L11

L15 0 SEA SSS SAM L14

0 SEA SSS FUL L14

L17 STR L14

L18 0 SEA SSS SAM L17

0 SEA SSS FUL L17

L20 STR L17

L21 0 SEA SSS SAM L20

10/590,575 2/19/09

| L22<br>L23 |      | 4 SEA SSS FUL L20<br>STR L20   |
|------------|------|--|
| L24        |      | 2 SEA SSS SAM L23  |
| L25        |      | STR L23  |
| L26        |      | 0 SEA SSS SAM L25  |
| L27        |      | 6 SEA SSS FUL L25  |
| L28        |      | 'HCAPLUS' ENTERED AT 17:39:23 ON 19 FEB 2009 1 SEA ABB=ON L27                                      |
|            |      |  |
|            | FILE | 'USPATFULL' ENTERED AT 17:39:30 ON 19 FEB 2009   |
| L29        |      | 3 SEA ABB=ON L27   |
| L30        | FILE | 'HCAPLUS, USPATFULL' ENTERED AT 17:39:46 ON 19 FEB 2009 4 DUP REMOV L28 L29 (0 DUPLICATES REMOVED) |
|            |      |  |
|            | FILE | 'BEILSTEIN' ENTERED AT 17:40:29 ON 19 FEB 2009   |
| L31        |      | 0 SEA ABB=ON L27   |

FILE HOME

#### FILE HCAPLUS

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FILE COVERS 1907 - 19 Feb 2009 VOL 150 ISS 8 FILE LAST UPDATED: 18 Feb 2009 (20090218/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

## http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

#### FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 18 FEB 2009 HIGHEST RN 1108235-09-1 DICTIONARY FILE UPDATES: 18 FEB 2009 HIGHEST RN 1108235-09-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 19 Feb 2009 (20090219/PD)
FILE LAST UPDATED: 19 Feb 2009 (20090219/ED)
HIGHEST GRANTED PATENT NUMBER: US7493662
HIGHEST APPLICATION PUBLICATION NUMBER: US20090049575
CA INDEXING IS CURRENT THROUGH 19 Feb 2009 (20090219/UPCA)
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USPATFULL now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

FILE BEILSTEIN
FILE LAST UPDATED ON April 1, 2008

FILE COVERS 1771 TO 2008.
FILE CONTAINS 10.322,808 SUBSTANCES

>>>PLEASE NOTE: Reaction Data and substance data are stored in separate documents and can not be searched together in one query. Reaction data for BEILSTEIN compounds may be displayed immediately with the display codes PRE (preparations) and REA (reactions). A substance answer set retrieved after the search for a chemical name, a compounds with available reaction information by combining with PRE/FA, REA/FA or more generally with RX/FA. The BEILSTEIN Registry Number (BRN) is the link between a BEILSTEIN compound and belonging reactions. For mo detailed reaction searches BRNs can be searched as reaction partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

- \* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST.
- \* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE
- \* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE
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>>> Price change as of January 1st, 2008: Connect Time and Structure Search fees re-introduced. See NEWS and HELP COST <<<